

GENERAL COOPERATION TREATY

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NOTIFICATION OF ELECTION

(PCT Rule 61.2)

Date of mailing (day/month/year) 26 November 1999 (26.11.99)
International application No. PCT/IB99/00602
International filing date (day/month/year) 07 April 1999 (07.04.99)
Applicant SEREGO ALLIGHIERI, Giadra et al

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents
 United States Patent and Trademark
 Office
 Box PCT
 Washington, D.C.20231
 ÉTATS-UNIS D'AMÉRIQUE

in its capacity as elected Office

1. The designated Office is hereby notified of its election made:

in the demand filed with the International Preliminary Examining Authority on:

25 October 1999 (25.10.99)

in a notice effecting later election filed with the International Bureau on:

2. The election was

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
 34, chemin des Colombettes
 1211 Geneva 20, Switzerland

Authorized officer

Lazar Joseph Panakal

PATENT COOPERATION TREATY

REC'D 26 MAY 2000

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference CM1749/VB	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/IB99/00602	International filing date (day/month/year) 07/04/1999	Priority date (day/month/year) 08/04/1998
International Patent Classification (IPC) or national classification and IPC A01N25/02		
Applicant THE PROCTER & GAMBLE COMPANY et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 8 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I Basis of the report
- II Priority
- III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV Lack of unity of invention
- V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI Certain documents cited
- VII Certain defects in the international application
- VIII Certain observations on the international application

Date of submission of the demand 25/10/1999	Date of completion of this report 24.05.2000
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Elliott, A Telephone No. +49 89 2399 8218



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I. Basis of the report

1. This report has been drawn on the basis of (*substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

Description, pages:

1-26 as originally filed

Claims, No.:

1-15 as originally filed

2. The amendments have resulted in the cancellation of:

- the description, pages:
 the claims, Nos.:
 the drawings, sheets:

3. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

4. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims - No: Claims 1-15
Inventive step (IS)	Yes: Claims - No: Claims 1-15
Industrial applicability (IA)	Yes: Claims 1-15 No: Claims -

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2. Citations and explanations

see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

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The application is directed towards a liquid disinfecting composition comprising an effective amount of a disinfecting material and a poly(alkylene glycol) alkyl ether. The composition is used as a non-streak hard surface cleaner.

The following documents will be mentioned in this report:

- D1: DE 196 36 114 A (SCHUMACHER HENNING DR) 12 March 1998
- D2: WO 97 31093 A (PROCTER & GAMBLE) 28 August 1997
- D3: WO 97 25106 A (PROCTER & GAMBLE) 17 July 1997
- D4: GB-A-2 298 791 (STEFAN CO) 18 September 1996
- D5: WO 94 17661 A (MENNO CHEMIE VERTRIEB GMBH) 18 August 1994
- D6: WO 97 42276 A (PROCTER & GAMBLE) 13 November 1997

V Reasoned statement under Art 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement

i. Novelty (Article 33(2) PCT)

D1 discloses a disinfecting agent containing an active substance and one or more glycol ethers and/or one or more glycol esters. The glycol ether or glycol ester has the formula $R_1-O(CH_2-CH_2-O)_n-R_2$ (R_1 is a straight or branched chain 1-7C alkyl or acyl group, n is 1-4 and R_2 is H or a straight or branched chain 1-7C alkyl or acyl group). Although the composition of the present application is generically described in this document, there are no novelty-destroying examples in D1.

D2 relates to disinfecting compositions comprising a peroxy bleach, an amphoteric surfactant, glutaraldehyde and an antimicrobial essential oil or an active thereof. (cf. page 13, line 36-page 14, line 28) Preferred hydrophobic non-ionic surfactants to be used in the compositions ... are surfactants ... according to the formula $RO(C_2H_4O)_n(C_3H_6O)_mH$ wherein R is a C6 to C22 alkyl chain or a C6 to C28 alkyl benzene chain, and wherein n+m is from 0 to 20 and n is from 0 to 15 and m is from 0 to 20, preferably n+m is from 1 to 15, n and m are from 0.5 to 15, more preferably n+m is from 1 to 10 and n and m are from 0 to 10. It would therefore appear that the liquid disinfecting compositions of the present application are suggested by D2 in that the preferred hydrophobic non-ionic surfactants according to D2 encompass compounds falling under the scope of the poly(alkylene glycol) alkyl ethers of the present application. Looking at the examples of D2, the non-ionic surfactants used

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are Dobanol 23.3® ($\text{RO}(\text{C}_2\text{H}_4\text{O})_n(\text{C}_3\text{H}_6\text{O})_m\text{H}$ where R is a mixture of C12 and C13 alkyl chains, n is 3 and m is 0) and Dobanol 91.10® ($\text{RO}(\text{C}_2\text{H}_4\text{O})_n(\text{C}_3\text{H}_6\text{O})_m\text{H}$ where R is a mixture of C9 to C11 alkyl chains, n is 10 and m is 0). It would therefore appear that compositions numbered XIII, XVI, XVII, XVIII, XIX, XXII, XXIII and XXIV are novelty destroying to present claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 15 as a result of Dobanol 91.10® falling under the scope of the poly(alkylene glycol) alkyl ester of the present application (Dobanol 23.3® does not fall under the presently-claimed scope as the compounds according to the present application are restricted to compounds where n is greater than 2). The subject-matter of claims 13 and 14 can also be seen to be disclosed in document D2 as the compositions of the examples according to D2 can be used in the form of a composition packaged in a spray dispenser (claim 12) or impregnated into a wipe (claim 13).

D3 discloses a liquid disinfecting composition comprising a peroxygen bleach and an antimicrobial active of essential oil or mixtures thereof. D3 contains the same passage as D2 with respect to the preferred hydrophobic non-ionic surfactants (cf. paragraph bridging pages 13 and 14). There are, however, no examples in D3 using such surfactants; novelty with respect to D3 is therefore acknowledged.

D4 is directed towards (cf. amended claims) a method for increasing the tuberculocidal activity of a quaternary ammonium salt comprising contacting a tuberculosis causing bacteria with a disinfecting composition containing at least about 8 wt. % of an alkylene glycol monoalkyl ether selected from the group consisting of mono-, di- and trialkylene glycol ethers where the alkylene portion is a 2-6C straight or branched chain alkylene and the alkyl portion of the ether is a 1-6C straight or branched chain alkyl, e.g. triethylene glycol monobutyl ether (cf. page 7, line 24). Again there are no examples falling under the presently-claimed scope.

D5 discloses a disinfectant for the control of parasitoses and the extermination of parasitic, invasive permanent forms, comprising a mixture of (a) one or several phenols, preferably 4-chloro-3-methylphenol, in a combination with keratolytically effective inorganic acids, preferably formic, salicylic and thioglycolic acids, individually or mixed together as a disinfectant active agent; (b) ethylene glycol dialkyl ethers of formula $\text{MeO}(\text{CH}_2\text{CH}_2\text{O})_n\text{Me}$ ($n = 1-8$) or a mixture of various chain lengths of these ethers; and (c) sodium or potassium salts of alkyl sulphonates or sulphates with

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primary or secondary chains having a length of C8-C18 or a mixture thereof as anionic surfactants. Again a generic disclosure of compositions falling under the presently-claimed scope and again no specific examples falling under said scope.

D6 discloses hard surface cleaners which leave no residues or streaks on the surface which has been cleaned. The cleaning compositions contain a hydrophilic non-ionic surfactant and an 8-18C alcohol and optionally a sulphated anionic surfactant and a hydrophobic non-ionic surfactant. The hydrophilic non-ionic surfactant can be of the formula C_xEO_yH where C is the hydrocarbon chain of an alcohol starting material, x the length of its hydrocarbon chain, EO ethoxy and y the average degree of ethoxylation. x is 9-18, preferably 9-14 and the average y is 8-30, preferably 10-20. Claim 4 of the present application states the disinfecting material to be an alcohol. Therefore it would appear that the subject-matter of claims 1, 2, 3, 4, 9, 10, 11, 12, 13 and 15 is not novel with respect to Examples 1-11 of D6.

ii. **Inventive Step (Article 33(3) PCT)**

- a. Taking document D6 as the closest prior art as this document discloses non-streaking, (disinfecting) hard surface cleaners comprising a hydrophilic non-ionic surfactant which can be of formula C_xEO_yH (C is the hydrocarbon chain of an alcohol starting material, x the length of its hydrocarbon chain, EO ethoxy and y the average degree of ethoxylation) and an 8-18C alcohol, the difference between this disclosure and the subject-matter of the present application can primarily be seen in the choice of disinfectant compound used and secondly in a variation of the hydrophilic non-ionic surfactant used. The assumption made here is that the skilled person considers the alcohols mentioned in D6 to be disinfecting in nature (as implied by the wording of present claim 4).

The object of the present application can therefore be seen to be the provision of further non-streaking disinfecting compositions for a variety of surfaces.

If one excludes the subject-matter of D6 (novelty destroying and directly derivable from the disclosure, i.e. any combination of an 8-18C alcohol with a surfactant of formula C_xEO_yH as defined in D6), the subject-matter of the present application with respect to D6 alone can be seen to involve an inventive step as there can be seen

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no way of predicting whether the use of other disinfecting materials instead of the alcohols would also result in the non-streaking effect. The key passages from D6 to support this viewpoint would appear to be that on page 7, the last 3 lines: these non-ionic surfactants are particularly effective on particulate soils and on greasy soils, but they will cause streaking if they are used on their own, and that on page 8, end of the first paragraph: addition of alcohol in the selected ratios results in a clear shine benefit.

- b. The other prior art documents make no mention at all of the problem of streaking of their formulations. In D2 we have novelty-destroying examples but no indication as to the finish provided by the product. The only document which mentions non-streaking compositions is document D6. Combining the teaching of document D6 that addition of an alcohol to a composition containing the compounds of formula C_xEO_yH reduces/eliminates the streaking effects of that compound with that of document D2 would lead the person skilled in the art to compositions falling under the presently-claimed scope (it is pointed out that the wording of the claims does not exclude an additional component such as an alcohol). Therefore claims 1-15 of the present application are to be objected to on the grounds of their subject-matter being obvious in the light of a combination of the subject-matter of documents D2 and D6. Similar argumentation can be given for document D3.

Furthermore, as documents D1 and D4 generically describe compositions falling under the presently claimed scope, the combination of the teaching of D6 of how to avoid streaking with these documents would also lead the skilled person to compositions fulfilling the object of the present application, i.e. to provide disinfecting compositions having minimal/no streaking.

VII Certain defects in the international application

Contrary to the requirements of Rule 5.1(a)(ii) PCT, neither has the relevant background art disclosed in documents D1-D6 been mentioned in the description, nor have these documents been identified therein.

VIII Certain observations on the international application

- i. The subject-matter of claim 1 of the application is considered very broad in scope in

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the light of the wording for the definitions R₁-R₃ "substituted or unsubstituted, linear or branched hydrocarbon chain having from 1 to 30 carbon atoms". The examples in the application only show concrete support for the substituents H and CH₃ for R₂, Et and Pr for R₁, and Bu and Me for R₃. There is therefore not considered to be sufficient evidence in the application that the whole subject-matter of claim 1 and also, in part, claim 2 actually solves the problem posed by the present application, i.e. to provide a disinfecting composition leaving a streak-free finish on the surface which has been cleaned therewith. Furthermore, what the applicant described as a poly(alkylene glycol) alkyl ether would, from the formula given, appear to encompass not only alkyl ethers but also other types of ether as well as esters, for example.

- ii. The term "effective amount" used in claim 1 of the application renders the claim unclear (Article 6 PCT).
- iii. There can be seen no support in the description for the subject-matter of claim 10.